Claims

We claim:

1.   A computer readable medium having a data structure thereon for storing an ink object, said data structure comprising:

a first portion having an ink object identifier;

a second portion identifying a size or count of tag data;

and a third portion having the tag data.

2.   The computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion relating to the version of the ink object.

3.   The computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing global properties.

4.   The computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing a global unique identifier.

5.   The computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing an ink space rectangle.

6.   The computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing drawing attributes.

7.   The computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing stroke descriptors.

8.   The computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing metrics.

9. The computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing the compression used.

10. The computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing local properties.

11. The computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing a drawing attribute index.

12. The computer readable medium according to claim 1, wherein said data structure is encoded.

13. The computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing predefined and custom GUIDs.

14. A computer readable medium having a data structure thereon, said data structure comprising:

a first portion having a tag;

a second portion identifying a size or count of tag data;

a third portion having the tag data;

a fourth portion having a table, said table including global unique identifiers.

15. The computer readable medium according to claim 14, wherein tags for said global unique identifiers are determined by the position of said global unique identifiers in said table.

16. The computer readable medium according to claim 14, wherein tags for said global unique identifiers are specified.

17. A computer readable medium having a data structure thereon, said data structure comprising:

a first portion having a tag;

a second portion identifying a size or count of tag data;

a third portion having the tag data;

a fourth portion describing an ink space rectangle.

18. A computer readable medium having a data structure thereon, said data structure comprising:

a first portion having a tag;

a second portion identifying a size or count of tag data;

a third portion having the tag data;

a fourth portion having a table, said table describing metrics of properties.

19. The computer readable medium according to claim 18, further comprising:

a fifth portion comprising a second table, said second table describing properties of strokes in which said properties are related to the metrics of properties in said fourth portion.

20. A computer readable medium having a data structure thereon, said data structure comprising:

a first portion having a tag;

a second portion identifying a size or count of tag data;

a third portion having the tag data;

a fourth portion having a table, said table describing a transform for at least one ink stroke.

21. A computer readable medium having a data structure thereon, said data structure comprising:

a first portion having a tag;

a second portion identifying a size or count of tag data;

a third portion having the tag data;

a fourth portion having a table, said table describing a drawing attribute for at least one ink stroke.

22.   A method for creating a data structure for storing ink comprising the steps of:

receiving ink strokes;

determining at least one ink property associated with the ink strokes;

determining if the ink property applies to at least two ink strokes; and,

creating a data structure with one representation of the ink property for said at least two ink strokes.

23.   A method for using a data structure for storing ink comprising the steps of:

identifying a tag in the data structure;

retrieving a size or count of data associated with the tag; and,

if an application can use tag, then reading the data associated with the tag, otherwise skipping the tag by skipping past the data based on the size or count of the data.

24.   A system for creating a data structure comprising:

an input configured to receive ink strokes;

a processor configured to parse the received ink strokes and to determine at least one property associated with the ink strokes; and

a storage configured to store the ink strokes in a data structure with at least one tag identifying said at least one property.

25.   A system for using a data structure comprising:

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a storage configured to store ink strokes in a data structure with at least one tag identifying at least one property; and,

a processor configured to retrieve the ink strokes and said at least one tag and apply said property to said ink strokes when rendering said ink strokes.